



PTO/SB/08A (08-03)

Substitute for form 1449B/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

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Sheet 1 of 1

Complete if Known

Application Number	09/944,049
Filing Date	August 30, 2001
First Named Inventor	Schall, Thomas J.
Art Unit	1648
Examiner Name	Mosher, Mary
Attorney Docket Number	019934-002510US

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TECH CENTER 1600/2900**U.S. PATENT DOCUMENTS+**

Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number Kind Code ² (if known)			
MM ↓	A1	US-4,243,805	01/06/1981	Protiva et al.	
	A2	US 2002-0127544 A1	09/12/2002	Schall et al.	

FOREIGN PATENT DOCUMENTS

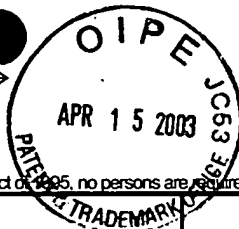
Examiner Initials*	Cite No. ¹	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³	Number ⁴	Kind Code ⁵ (if known)				
MM ↓	B1	PCT	WO 02/062296	A2	08/15/2002	ChemoCentryx, Inc.		<input type="checkbox"/>
								<input type="checkbox"/>

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁶
MM ↓	C1	BEERS, M. et al. <u>The Merck Manual of Diagnosis and Therapy</u> , 17th Ed., 1999, pp. 1294-1296, Published by Merck Research Laboratories.	
	C2	HARDMAN, J. et al. Goodman & Gilman's <u>The Pharmacological Basis of Therapeutics</u> , 9th Ed., 1996, p. 51, 57-58, McGraw-Hill, printed in the U.S.A.	
	C3	HORUK, R. "Molecular properties of the chemokine receptor family", <u>Trends Pharm. Sci.</u> , Vol. 15, (1994), pp. 159-165.	
	C4	SCHALL, T.J. et al., "Chemokines, leukocyte trafficking, and inflammation", <u>Curr. Opin. Immunol.</u> , Vol. 6, (1994), pp. 865-873.	
	C5	SINDELAR, K et al. "Neurotropic and psychotropic agents", <u>Res. Inst. Pharm. Biochem.</u> , 1976, pp. 910-922, Vol. 41, No. 3. <i>Abstract only</i>	
	C6	ZLOTNIK et al. "Recent Advances in Chemokines and Chemokine Receptors" <u>Critical Reviews in Immunology</u> , 1999, pp. 1-47, Vol. 19	

Examiner Signature	<i>Mosher</i>	Date Considered	10-27-03
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² Kind Codes of U.S. Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.



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		Number Kind Code ² (if known)			
MM	AA	3,379,729	04-23-1968	Protiva et al.	
	AB	5,665,362	09-09-1997	Inglis et al.	
	AC	5,753,476	05-19-1998	Jones et al.	
	AD	5,756,264	05-26-1998	Schwartz et al.	
	AE	5,824,318	10-20-1998	Mohr et al.	
	AF	5,948,775	09-07-1999	Koko et al.	
	AG	5,998,160	12-07-1999	Berens	
	AH	6,150,132	11-21-2000	Wells et al.	
	AI	US-6,420,121 B1	07-16-2002	Nelson et al.	

FOREIGN PATENT DOCUMENTS

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		Country Code ³	Number ⁴	Kind Code ⁵ (if known)				
MM	AJ	EP	0 277 773	A1	08-10-1988	The Board of Trustees of the Leland Stanford Junior University		
	AK	WO	98/02151	A2	01-22-1998	Leukosite, Inc.		<input type="checkbox"/>
	AL	WO	98/11073	A1	03-19-1998	Pharmacia & Upjohn Company		<input type="checkbox"/>
	AM	WO	00/00491	A1	01-06-2000	The Regents of the University of California		<input type="checkbox"/>
	AN	WO	02/18954	A2	03-07-2002	ChemoCentryx, Inc.		<input type="checkbox"/>

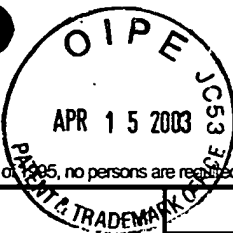
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1600/2900**OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS**

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M M	AO	BRANCH, ANDREA D.; A good antisense molecule is hard to find; <i>TIBS</i> 23; February 1998; pp. 45-50;	
	AP	CROOKE, STANLEY T. et al.; <i>Antisense Research and Applications; Basic Principles of Antisense Therapeutics</i> ; chapters 1-3; pp. 1-53	
	AQ	CRYSTAL, RONALD G.; Transfer of Genes to Humans: Early Lessons and Obstacles to Success; <i>Science</i> ; pp. 404-410; 20 October 1995; Vol. 270;	
	AR	FRANCKEN, BART J.B., et al.; Human 5-Hydroxytryptamine _{2A} Receptors Activate Coexpressed G _i and G _o Proteins in <i>Spodoptera frugiperda</i> 9 Cells; <i>Molecular Pharmacology</i> ; pp. 1034-1044; May 2000; Vol. 57, No. 5	
	AS	HA, HUNJOO, et al.; Atherogenic lipoproteins enhance mesangial cell expression of platelet-derived growth factor: Role of protein tyrosine kinase and cyclic AMP-dependent protein kinase A; <i>J Lab Clin Med</i> ; pp. 456-465; May 1998; Vol. 131, No. 5	
	AT	KOYAMA, NORIYUKI, et al.; Heparan Sulfate Proteoglycans Mediate a Potent Inhibitory Signal for Migration of Vascular Smooth Muscle Cells; <i>Circulation Research</i> ; pp. 305-313; August 10, 1998; Vol. 83, No. 3	
	AU	KUNG, H.F., et al.; Dopamine D-2 Receptor Imaging Radiopharmaceuticals: Synthesis, Radiolabeling, and in Vitro Binding of (R)-(+)- and (S)-(-)-3-Iodo-2-hydroxy-6-methoxy-N-[(1-ethyl-2-pyrrolidinyl) methyl] benzamide; <i>Journal of Medical Chemistry</i> ; pp. 1039-1042; 1988; Vol. 31, No. 5	
	AV	MANNING, WILLIAM C., et al.; Use of a recombinant murine cytomegalovirus expressing vesicular stomatitis virus G protein to pseudotype retroviral vectors; <i>Journal of Virological Methods</i> ; 1998; pp. 31-39; Vol. 73	
	AW	MCNALL, STEVEN J., et al.; Novel Serotonin Receptors in <i>Fasciola</i> . Characterization by Studies on Adenylate Cyclase Activation and [³ H]LSD Binding; <i>Biochemical Pharmacology</i> ; pp. 2789-2797; 1984; Vol. 33, No. 17	
	AX	PADIA, J.K., et al; Design and Synthesis of Novel Nonpeptide CCK-B Receptor Antagonists; <i>Bioorganic & Medicinal Chemistry Letters</i> ; pp. 805-810; 1997; Vol. 7, No. 7	
	AY	PADIA, J.K., et al.; Novel Nonpeptide CCK-B Antagonists: Design and Development of Quinazolinone Derivatives as Potent, Selective, and Orally Active CCK-B Antagonists; <i>Journal of Medicinal Chemistry</i> ; pp. 1042-1049; 1998; Vol. 41, No. 7	
	AZ	PALÙ, GIORGIO, et al.; In pursuit of new developments for gene therapy of human diseases; <i>Journal of Biotechnology</i> ; pp. 1-13; 1999; Vol. 68	
	BA	SCHALL, T.J., et al.; Biology of the Rantes/SIS Cytokine Family; <i>Cytokine</i> ; pp. 165-183; May 1991; Vol. 3, No. 3	
✓	BB	SCHOFIELD, J.P., et al.; Non-viral approaches to gene therapy; <i>British Medical Bulletin</i> ; pp. 56-71; 1995; Vol. 51, No. 1	

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SignatureDate
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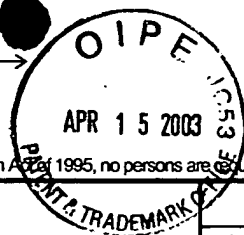
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Sheet 3 of 3**Complete if Known**

Application Number	09/944,049
Filing Date	August 30, 2001
First Named Inventor	Schall, Thomas J., et al.
Art Unit	1648
Examiner Name	Mosher, Mary
Attorney Docket Number	019934-002510US

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TECH CENTER 1600/2900**OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS**

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
MM	BC	VERMA, INDER M., et al.; Gene therapy - promises, problems and prospects; <i>Nature</i> ; pp. 239-242; 18 September 1997; Vol. 389	
J	BD	WANG, T.S., et al.; A Simple Method of Preparation for [¹²³ I]-(S)-(-)-IBZM; <i>Applied Radiation and Isotopes</i> ; pp. 369-372; 1998; Vol. 49, No. 4	

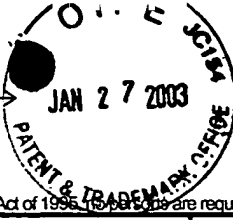
Examiner Signature	<u>Mosher</u>	Date Considered	<u>10-27-03</u>
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Examiner	Cite No. ¹	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
MM	AA	5,529,771		06-25-1996	Hooks et al.	
	AB	5,652,133		07-29-1997	Murphy	
	AC	5,720,957		02-24-1998	Jones et al.	
	AD	5,763,217		06-09-1998	Cynader et al.	
	AE	5,843,458		12-01-1998	Jones	
	AF	5,846,806		12-08-1998	Jones et al.	
	AG	5,866,136		02-02-1999	Ramshaw et al.	
	AH	5,908,780		06-01-1999	Jones	
	AI	5,939,320		08-17-1999	Littman et al.	
	AJ	5,965,697		10-12-1999	Czaplewski et al.	
	AK	6,028,169		02-22-2000	Kreider et al.	
	AL	6,031,080		02-29-2000	Williams, et al.	
	AM	6,033,671		03-07-2000	Frueh et al.	
	AN	6,034,102		03-07-2000	Aiello	
	AO	6,051,375		04-18-2000	Rose et al.	
	AP	6,051,428		04-18-2000	Fong et al.	

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MM	AQ	WO	94/11504	A1	05-26-1994	Genentech, Inc.		
	AR	WO	96/23068	A1	08-01-1996	Glaxo Group Limited		
	AS	WO	99/00510	A1	01-07-1999	Brigham and Women's Hospital		
	AT	WO	99/09178	A1	02-25-1999	Advanced Research and Technology Institute		
	AU	WO	99/27122	A1	06-03-1999	Transgene S.A.		abstract only
	AV	WO	99/36562	A1	07-22-1999	Human Gene Therapy Research Institute		
	AW	WO	99/36568	A2	07-22-1999	Anmelder und Erfinder		abstract only
	AX	WO	99/61472	A1	12-02-1999	Valentis, Inc.		

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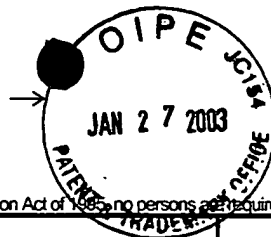
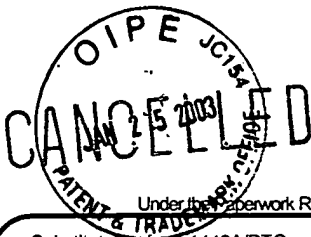
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MM	AY	WO	00/06203	A1	02-10-2000	Technion Research and Development Foundation Ltd.		
	AZ	WO	00/11950	A1	03-09-2000	Oregon Health Science University		
	BA	WO	00/34494	A1	06-15-2000	The Government of the United States of America (Department of Health and Human Services)		
	BB	WO	02/17900	A2	03-07-2002	ChemoCentryx, Inc.		
	BC	WO	02/17969	A2	03-07-2002	ChemoCentryx, Inc.		

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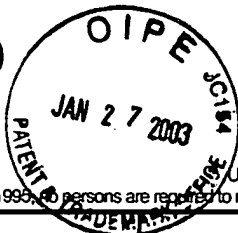
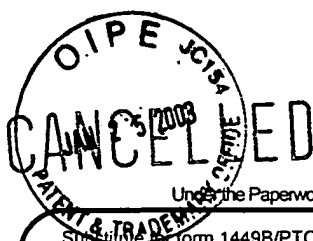
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MM	BD	BEISSER, PATRICK S., et al.; The R33 G Protein-Coupled Receptor Gene of Rat Cytomegalovirus Plays an Essential Role in the Pathogenesis of Viral Infection; <i>Journal of Virology</i> ; March 1998; pp. 2352-2363; Vol. 72, No. 3	
	BE	BEISSER, PATRICK S., et al.; Deletion of the R78 G Protein-Coupled Receptor Gene from Rat Cytomegalovirus Results in an Attenuated, Syncytium-Inducing Mutant Strain; <i>Journal of Virology</i> ; September 1999; pp. 7218-7230; Vol. 73, No. 9	
	BF	BEISSER, P.S., ET AL.; Viral Chemokine Receptors and Chemokines in Human Cytomegalovirus Trafficking and Interaction with the Immune System; <i>Current Topics in Microbiology and Immunology</i> ; 2002; pp. 203-234; Vol. 269; Springer, Berlin, DE; XP008009472	
	BG	BILLSTROM, MARCELLA A. et al.; Intracellular Signaling by the Chemokine Receptor US28 during Human Cytomegalovirus Infection; <i>Journal of Virology</i> ; July 1998; pp. 5535-5544; Vol. 72, No. 7	
	BH	BODAGHI, BAHRAM, et al.; Chemokine Sequestration by Viral Chemoreceptors as a Novel Viral Escape Strategy: Withdrawal of Chemokines from the Environment of Cytomegalovirus-infected Cells; <i>J. Exp. Med.</i> ; September 7, 1998; pp. 855-866; Vol. 188, No. 5	
	BI	BORST, M.E., et al.; Development of a cytomegalovirus vector for somatic gene therapy; <i>Bone Marrow Transplantation</i> ; 2000; pp. S80-S82; Supp. 2	
	BJ	CHA, TAI-AN, et al.; Human Cytomegalovirus Clinical Isolates Carry at Least 19 Genes Not Found in Laboratory Strains; <i>Journal of Virology</i> ; January 1996; pp. 78-83; Vol. 70, No. 1	
	BK	CHEE, M.S., et al.; Analysis of the Protein-Coding Content of the Sequence of Human Cytomegalovirus Strain AD169; <i>Current Topics in Microbiology and Immunology</i> ; 1990; pp. 126-169; Vol. 154	
	BL	CHEE, M.S., et al.; Human cytomegalovirus encodes three G protein-coupled receptor homologues; <i>Nature</i> ; April 19, 1990; pp. 774-777; Vol. 344	
	BM	CRAIGEN, J.L., et al.; Human cytomegalovirus infection up-regulates interleukin-8 gene expression and stimulates neutrophil transendothelial migration; <i>Immunology</i> ; 1997; pp. 138-145; Vol. 92	
	BN	DAVIS-POYNTER, Nicholas J., et al.; Masters of deception: A review of herpesvirus immune evasion strategies; <i>Immunology and Cell Biology</i> ; 1996; pp. 513-522; Vol. 74	
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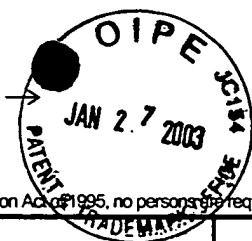
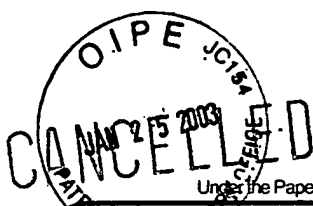
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Art Unit	1648
Examiner Name	Mosher, Mary
Attorney Docket Number	019934-002510US

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
M, M	BS	GenBank Accession No: L20501; 2 May, 1996	
	BT	GenBank Accession No: AF073831; 23 June 2000	
	BU	GenBank Accession No: AF073832; 23 June 2000	
	BV	GenBank Accession No: AF073833; 23 June 2000	
	BW	GenBank Accession No: AF073834; 23 June 2000	
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	CA	GILBERT, MARK J., et al.; Cytomegalovirus selectively blocks antigen processing and presentation of its immediate-early gene product; <i>Nature</i> ; 24 October 1996; pp. 720-722; Vol. 383	
	CB	GOMPELS, U.A.; et al.; The DNA Sequence of Human Herpesvirus-6: Structure, Coding Content, and Genome Evolution; <i>Virology</i> ; 1995; pp. 29-51; Vol. 209	
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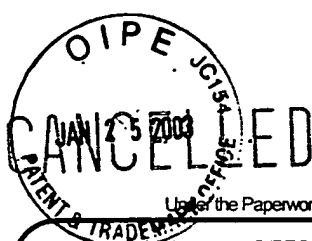
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MM	CH	KLEDAL, THOMAS N., et al.; A Broad-Spectrum Chemokine Antagonist Encoded by Kaposi's Sarcoma-Associated Herpesvirus; <i>Science</i> ; 12 September 1997; pp. 1656-1659; Vol. 277	
	CI	KLEDAL, THOMAS N., et al.; Selective recognition of the membrane-bound CX ₃ C chemokine, fractalkine, by the human cytomegalovirus-encoded broad-spectrum receptor US28; <i>FEBS Letters</i> ; 1998; pp. 209-214; Vol. 441	
	CJ	KLEIJNEN, MAURITS F., et al.; A mouse cytomegalovirus glycoprotein, gp34, forms a complex with folded class I MHC molecules in the ER which is not retained but is transported to the cell surface; <i>EMBO Journal</i> ; 1997; pp. 685-694; Vol. 16, No. 4	
	CK	KOTENKO, SERGEI, et al.; Human cytomegalovirus harbors its own unique IL-10 homolog (cmvIL-10); February 15, 2000, pp. 1695-1700, Vol. 97, No. 4	
	CL	KUHN, DONALD, E., et al.; The Cytomegalovirus US28 Protein Binds Multiple CC Chemokines with High Affinity; <i>Biochemical and Biophysical Research Communications</i> ; June 6, 1995; pp. 325-330; Vol. 211, No. 1	
	CM	LOCKRIDGE, KRISTEN M., et al.; Primate Cytomegaloviruses Encode and Express an IL-10-like Protein; <i>Virology</i> ; 2000; pp. 272-280; Vol. 268	
	CN	MAHALINGAM, SURENDRAN, et al.; Chemokines and chemokine receptors in infectious diseases; <i>Immunology and Cell Biology</i> ; 1999; pp. 469-475; Vol. 77	
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	CV	NEOTE, KULDEEP, et al. Molecular Cloning, Functional Expression, and Signaling Characteristics of a C-C Chemokine Receptor; <i>Cell</i> ; February 12, 1993; pp. 415-525; Vol. 72	

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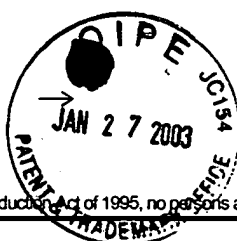
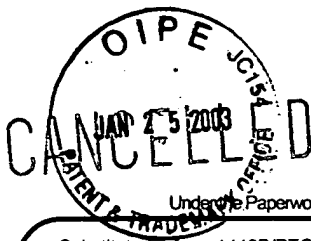
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M	CW	NISHIYORI, ATSUSHI, et al.; Localization of fractalkine and CX ₃ CR1 mRNAs in rat brain: does fractalkine play a role in signaling from neuron to microglia?; <i>FEBS Letters</i> ; 1998; pp. 167-172; Vol. 429	
	CX	NORDØY, INGVLID, et al.; Immunologic Parameters as Predictive Factors of Cytomegalovirus Disease in Renal Allograft Recipients; <i>The Journal of Infectious Diseases</i> ; 1999; pp. 195-198; vol. 180	
	CY	PASS, ROBERT F., et al.; A Subunit Cytomegalovirus Vaccine Based on Recombinant Envelope Glycoprotein B. and a New Adjuvant; <i>The Journal of Infectious Diseases</i> ; 1999; pp. 970-975; Vol. 180	
	CZ	PENFOLD, MARK E.T.; et al.; Cytomegalovirus encodes a potent α chemokine; <i>Proc. Natl. Acad. Sci. USA</i> ; August 1999; pp. 9839-9844; Vol. 96	
	DA	PLESKOFF, OLIVIER, et al; The Cytomegalovirus-Encoded Chemokine Receptor US28 Can Enhance Cell-Cell Fusion Mediated by Different Viral Proteins; <i>Journal of Virology</i> ; August 1998; pp. 6389-6397; Vol. 72, No. 8	
	DB	QUINNAN Jr., M.D., GERALD V., et al.; Comparative Virulence and Immunogenicity of the Towne Strain and a Nonattenuated Strain of Cytomegalovirus; <i>Annals of Internal Medicine</i> ; 1984; pp. 478-483; Vol. 101	
	DC	RAWLINSON, WILLIAM D., et al.; Analysis of the Complete DNA Sequence of Murine Cytomegalovirus; <i>Journal of Virology</i> ; December 1996; pp. 8833-8849; Vol. 70, No. 10	
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	DE	REYBURN, HUGH T., et al.; The Class I MHC homologue of Human Cytomegalovirus inhibits attack by natural killer cells; <i>Nature</i> ; 3 April 1997; pp. 514-517; Vol 386	
	DF	ROLLINS, BARRETT J.; Chemokines; <i>Blood</i> ; August 1, 1997; pp. 909-928; Vol. 90, No. 3	
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	DH	SALLUSTO, FEDERICA, et al.; Chemokines and chemokine receptors in T-cell priming and Th1/Th2-mediated responses; <i>Immunology Today</i> ; December 1998; pp. 568-574; Vol. 19, No. 12	
	DI	SEOW, HENG-FONG; Pathogen interactions with cytokines and host defence: an overview; <i>Veterinary Immunology and Immunopathology</i> ; 1998; pp. 139-148; Vol. 63	
	DJ	SHELLAM, G.R.; The Potential of Murine Cytomegalovirus as a Viral Vector for Immunocontraception; <i>Reprod. Fertil. Dev.</i> ; 1994; pp. 401-409; Vol. 6	
	DK	STREBLOW, DANIEL N., et al.; The Human Cytomegalovirus Chemokine Receptor US28 Mediates Vascular Smooth Muscle Cell Migration; <i>Cell</i> ; November 24, 1999; pp. 511-520; Vol. 99	

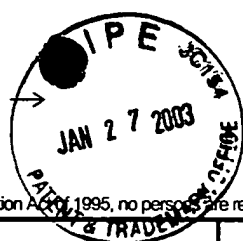
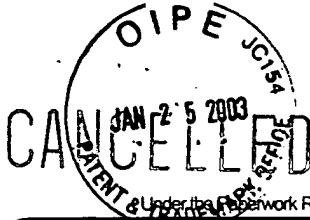
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mm	DL	SWISS-PROT Accession No. P16849; 1 August 1990	
	DM	THÄLE, REGINE, et al.; Identification and Expression of an Murine Cytomegalovirus Early Gene Coding for an Fc Receptor; <i>Journal of Virology</i> ; December 1994; pp. 7757-7765; Vol. 68, No. 12	
	DN	TOMASEC, PETER, et al.; Surface Expression of HLA-E, an Inhibitor of Natural Killer Cells, Enhanced by Human Cytomegalovirus gpUL40; <i>Science</i> ; February 11, 2000; pp. 1031-1033; Vol. 287	
	DO	VIEIRA, JEFFREY, et al.; Functional Analysis of the Human Cytomegalovirus US28 Gene by Insertion Mutagenesis with the Green Fluorescent Protein Gene; <i>Journal of Virology</i> ; October 1998; pp. 8158-8165; Vol. 72, No. 10	
	DP	WARD, STEPHEN G., et al.; Chemokines and T Lymphocytes: More than an Attraction; <i>Immunity</i> ; July 1998; pp. 1-11; Vol. 9	
	DQ	ZIEGLER, HEIKE, et al.; A mouse Cytomegalovirus Glycoprotein Retains MHC Class I Complexes in the ERGIC/cis-Golgi Compartments; <i>Immunity</i> ; January 1997; pp. 57-66; Vol. 6	

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